

HEALTH PILLOW

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention:

[0002] The present device relates to a pillow which incorporates certain materials directed to promoting the health of the user by releasing anions and far-infrared emissions.

[0003] 2. General Background and State of the Art:

[0004] Conventional pillows attempt to promote comfortable sleep by varying the shape, hardness, air permeability, moisture absorption and antibacterial characteristics of the materials of the pillow. However, these conventional pillows are unable to emit beneficial anions and far-infrared emissions to strengthen the immune system of the user, stabilize moods, improve bodily functions, promote the expelling of waste products, improve respiratory function or relieve fatigue. Therefore, a need was perceived for a pillow that promotes comfortable sleep and improves the health of the user.

INVENTION SUMMARY

[0005] The present invention is directed to a pillow containing a powder mixture in the materials of the pillow which generates anions and far-infrared emissions to promote the health of the user. The powder mixture includes at least one poly-element mineral and can also include far-infrared emitting materials. To disperse the powder mixture within the core of the pillow, the pillow core can be immersed in a solution of the powder mixture and a resin. Another method to disperse the powder mixture is by spraying or applying a solution of the powder mixture and a resin on the surface of the pillow core. The powder mixture can also be mixed into a material that is eventually formed into the foam for the pillow.

[0006] Accordingly, it is an object of the present invention to provide a pillow that emits anions and far-infrared emissions which improve the blood circulation in the neck and shoulders, serves to strengthen the immune system, stabilizes moods, improves bodily functions, promotes

the expelling of waste products, improves respiratory function, relieves fatigue and promotes more comfortable sleep. Other and further objects and advantages will appear hereinafter.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] It is to be understood that the accompanying drawing is provided for the purpose of illustration only, and it is not intended as a definition of the limits of the invention. The drawing schematically illustrates a preferred embodiment of the present invention in which:

[0008] Figure 1 is a sectional view of a pillow employing the preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0009] FIG. 1 depicts a sectional view of an exemplary health pillow 10. The exemplary health pillow 10 includes a body 12 and a covering layer 14. The body 12 is preferably formed from an elastic material such as a low resilience urethane foam or a synthetic rubber. The covering layer 14 is preferably made from a fibrous material and may be separate from the body 12. If the covering layer 14 is separate from the body 12, the body 12 is inserted into the covering layer 14. Alternatively, the covering layer 14 may be permanently attached to the body 12 by an adhesive.

[0010] The health pillow 10 preferably contains a powdered mixture of poly-element minerals or far-infrared emitting materials or both, as described below, in the body 12 and/or the covering layer 14. The term pillow core refers individually to the body 12 or the covering layer 14 or a combination thereof.

[0011] The following compounds are made into powder and used as far-infrared emitting materials: alumina (Al_2O_3), titania (TiO_2), ferrite (Fe_2O_2), chromium oxide (CrO_3), silica (SiO_2), yttria (Y_2O_2), and magnesia (MgO). The far-infrared emissions from these materials can warm the neck and shoulders of a person laying his or her head on the health pillow 10. Consequently, the blood circulation in the capillary blood vessels is improved, and shoulder stiffness and neck stiffness is alleviated.

[0012] The poly-element minerals present in the powdered mixture include silicon-based materials and other minerals and various elements, which may occur naturally as perlite,

pitchstone, and tourmaline. These minerals radiate electromagnetic waves (feeble energy) with a wave length of 4 to 14 μm . These electromagnetic waves generated by the poly-element minerals excite the electrons in the atomic nuclei surrounding the health pillow 10. As a result, water clusters are cut or shortened, decreasing the volume of water and increasing the specific gravity. Furthermore, the free water will attach more readily to the external cell membranes of animals and plants. As a result, the penetration of water, as well as that of Ca^{2+} , occurs within the cells, to activate several functions of the cells. Thus, when a person places his or her head on the health pillow 10, blood flow and cell activity will be promoted.

[0013] To produce the powdered mixture, a poly-element mineral, such as perlite, pitchstone or tourmaline, may be milled into a powder the size of about 1 to 3 μm , for example by the use of a ball mill. Preferably, the poly-element mineral powder is made and used by blending two or more such minerals. The powder can be used after it has been milled or, alternatively, the powder can be further purified by mixing it with water, then heating or pressurizing the solution. Known techniques of vacuum-freeze drying or spray drying the solution can be used to isolate the powder. The following chart shows the contents of perlite:

Table 1

silicon dioxide (SiO_2)	71.94%
aluminum oxide (Al_2O_3)	14.94%
ferrous oxide (Fe_2O_3)	2.54%
magnesium oxide (MgO)	0.44%
calcium oxide (CaO)	2.47%
alkali oxide ($\text{K}_2\text{O} + \text{Na}_2\text{O}$)	6.87%
manganese oxide (MnO)	0.03%
phosphoric anhydride (P_2O_5)	0.14%
ignition loss	3.43%
drying loss (at 110°C)	0.07%
other, titanium	Trace

[0014] Several methods may be used to incorporate the powdered mixture containing the poly-element minerals within the body 12 or the covering layer 14. For example, the powder can be mixed with a resin comprising 50% polyvinyl chloride (PVC) and 50% dioctyl phthalate, a

plasticizer. In addition to the resin and the powdered poly-element minerals, the powdered mixture can also include powdered far-infrared emitting materials. To distribute the powdered mixture within the health pillow 10, the body 12 and/or the covering layer 14 can be immersed in a solution of the powdered mixture and resin, or the powdered mixture and resin can be sprayed or applied to the surface of the body 12 and/or the covering layer 14. In addition, the mixture can be combined with the material that creates the foam for the body 12. The percentage of the weight of the powdered mixture to that of the entire health pillow 10 is preferably about 1 percent to 3 percent, but a range of 0.2 percent to 5 percent may be used.

[0015] Because the present invention is directed to the incorporation of poly-element minerals or far-infrared emitting materials, or both, into the health pillow 10, the present invention is not constrained by the constituent materials, the shape, or the manufacturing method of the health pillow 10, or the method of incorporation of the powdered mixture into the health pillow 10. Furthermore, the health pillow 10 can comprise a combination of the body 12 and the covering layer 14 or just the body 12 without a covering layer 14.

[0016] In an alternative embodiment, the health pillow 10 may be fitted with magnets. The magnetic force generated by the magnets may further increase the blood flow in between the head, neck and shoulders and further alleviate stiff shoulders and stiff neck. Preferably, permanent magnets of 400 gauss to 1200 gauss are used with the health pillow 10.

[0017] Thus, a pillow has been disclosed which includes materials that emit anions and far-infrared radiation to promote the health of the user. While variations of the illustrated preferred embodiment have been shown and described, it would be apparent to those skilled in the art that many more modifications are possible without departing from the inventive concepts herein.